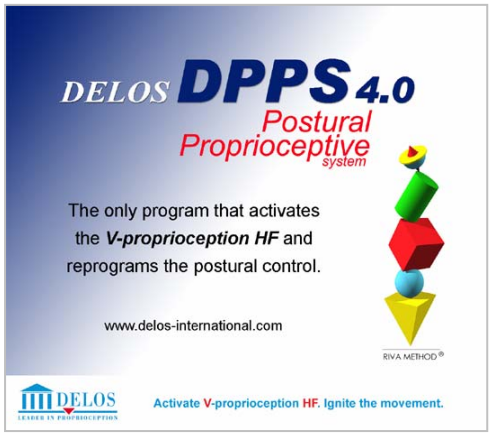
User's Manual

DELOS POSTURAL EXPLORER
DELOS POSTURAL PROPRIOCEPTIVE SYSTEM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Postural Proprioceptive system
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RIVA METHOD®
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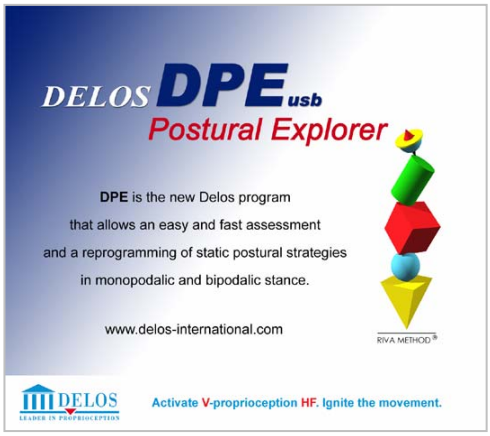
Activate V-proprioception HF. Ignite the movement.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Postural Explorer
DPE is the new Delos program that allows an easy and fast assessment and a reprogramming of static postural strategies in monopodalic and bipodalic stance.
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CE

Products comply with the European Directive 93/42 for Medical Devices

DELOS
LEADER IN PROPRIOCEPTION

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Delos Equilibrium Board is a patented instrument.
European patent n. 0862930
Delos Vertical Controller® – Patent Pending

The reference language in legal seat is the Italian language.

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INFORMATIONS

COMPUTER SYSTEM REQUIREMENTS:

Pentium® IV Intel® Processor 1.4 GHz or superior.
256 Mb RAM. 3Gb free on Hard disk C.
CD ROM 32x or faster - Colour Monitor 1024x768 pixel
WindowsXP Professional
The recommended operating system is WindowsXP Professional because it's optimized for the simultaneous use of several usb port.
One free usb port * (for DEB and DEB light).
One free usb port * (for each DVC).

* The number of USB ports can be increased with a supplied "usb HUB" device (NOT provided) which guarantees 500 mA for each port.

In order to guarantee the good working of the USB doors:

- ► for tower PC: install one **"USB Card D-LINK DU-520"** (www.dlink.com)
- ► for lap-top: use a supplied **" usb HUB "** which guarantees 500 mA for each port

WARNINGS:

At the first running of the program a warnings window is opened: read carefully the indications. It will be possible to choose the option "Do not show in future" marking the "check-box". To call again the window click on "Help" from menu bar and press "Starting warnings".

INFORMATION FOR THE SAFETY: WARNING

WARNING

For the special characteristics of DEB, Delos s.r.l. company is not responsible for any direct or indirect damages, caused to subjects or things by improper and unwise use of the product.

1. The instruments have to be placed on a level and anti-slide surface with enough free space from any obstacles.
2. The computer must be plugged to the electric network with a loader in accordance with the security rules CEI EN 60601-1.
3. It is recommended to use Delos Equilibrium Board bare-foot or with special footwear which allow a good adherence on the instrument.
4. Using Delos Equilibrium Board, look out your hands !
5. Delos devices don't contain any components directly replaceable by the user. For any repairs address yourselves to the Delos qualified technicians.

INSTRUMENTS DESCRIPTION

DEB - Delos Equilibrium Board: electronic rocking board, in duralumin and wooden cover, with visual tracking of micro translations of the point of support. The mono-bipodalic stance or the seated position together with the visual tracking of the trace on the monitor (that's the board micro translations) creates high frequency instability conditions. Size: 320 x 320 x 60 mm. Weight: 3,9 kg. DEB is equipped with a dedicated software.
Variant: **DEB Light - Delos Equilibrium Board Light**. It has a reduced size and a simplified software.
DVC - Delos Vertical Controller: postural reader. It records and visualizes in real time the movements of the trunk (or the body segments it's applied to) on the X-Y planes. Size: 74 x 50 x 27 mm. Weight: 340 g. DVC is equipped with a dedicated software (DPE).

ACCESSORIES DESCRIPTION

DAD - Delos Assistant Desk: work station that optimizes the use of the Delos devices. The monitor, the keyboard supports and the hand support bar are adjustable in height. The sensor shows (the DEB trace change from yellow to red) when the subject touched the DPA (leaning on hands - precaution strategy) in order to restore the equilibrium.
DPA - Delos Postural Assistant: the "portable" version of DAD. It retains its "hand support bar" adaptability thanks to a telescopic system of vertical positioning.
DPB - Delos Postural Bench: work station that allows tests and training in "seated on DEB". The support surface, vertically adjustable, allows board adjustment to keep the subject's feet off the ground according to protocol.
DSK - Delos Sensor Kit: direct link adaptor (usb) of the DAD or DPA sensor bar to the computer.

DESTINATION OF USE

Delos Postural Proprioceptive System (DPPS) devices are used by the man with the goal of functional diagnosis, prevention, control, therapy or attenuation of an illness; of diagnosis, control, therapy, attenuation or compensation of a handicap; of survey a physiological process. The device doesn't allow to make a pathological diagnosis, nor to provide data that can contribute to formulate a diagnosis. The product is conceived for performance assessments of systems involved on movement and in conditions of gravity interaction.
DEB, DEBLight, DAD, DPA and DPB devices can be used by subjects until the maximum body weight of 130 kg.

CONTRAINDICATION FOR USE

Delos devices don't present contraindications for use.

USE AND MAINTENANCE

Before cleaning the devices: stop the connection with the computer.
For every user it's important to clean (with cloth and alcohol) the wooden cover that is dealt with painting at high non slip resistance.
In order to guarantee an optimal working of the mechanical parts that composes the DEB, we suggest to make cyclically and when necessary the cleaning of the metallic basis with a cloth and some alcohol. To reduce to the minimum the wear of the rolling parts it

is necessary that the projection of the subject's barycentre falls on the centre of the board. On the other hand, exercises done with the load on the heel rather than on the forefoot can cause extra rubbings of the lateral guides of slip. The DVC can be cleaned with a humid cloth. The accessories can be cleaned with water and plastic detergents.

ELIMINATION

The devices are comparable to the electronic products of common use and must be eliminated according to regulation.

SUPPLY

Delos Equilibrium Board and Delos Vertical Controller are fed through the USB door of the PC (the PC must be marked CE and answer to the characteristics of security provided for by the regulation). **Voltage: 5 V following USB specification.**

STOCKAGE AND TRANSPORT

Temperature	
Functioning	**from +10° to +40°C**
Transport and storage	**from +5° to +75°C**
Relative dampness	
Functioning	**from 10% to 80% without damp**
Transport and storage	**from 5% to 95%**

PRODUCTS LABELS

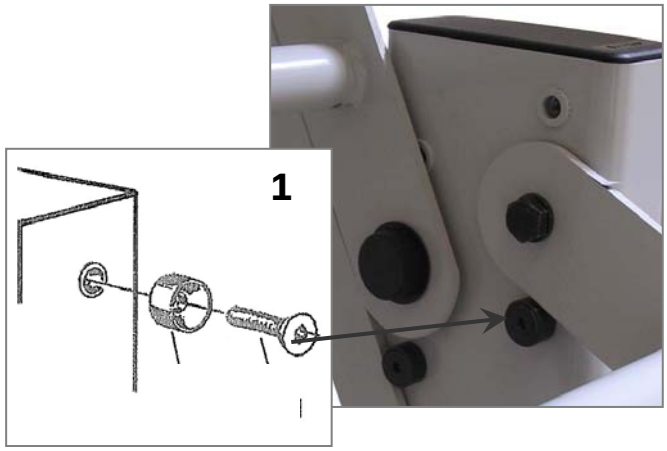
PRODUCT	LABEL	SERIAL NUMBER	POSITIONING
DEB **Delos Equilibrium Board**		**From DEB00001 to DEB00100**	**Lower surface rocking part**
DEL **Delos Equilibrium Board Light**		**From DEL00001 to DEL00100**	**Lower surface rocking part**
DVC **Delos Vertical Controller**		**From DVC00001 to DVC00100**	**Posterior surface**
DAD **Delos Assistant Desk (accessory)**		**From DAD00001 to DAD00100**	**Posterior surface vertical post**
DPA **Delos Postural Assistant (accessory)**		**From DPA00001 to DPA00100**	**Posterior surface sensor bar**
DPB **Delos Postural Bench (accessory)**		**From DPB00001 to DPB00100**	**Posterior surface vertical post**
DSK **Delos Sensor Kit (accessory)**		**From DSK00001 to DSK00100**	**Inferior side of the box**

ACCESSORIES ASSEMBLY

DAD - Delos Assistant Desk - ASSEMBLY

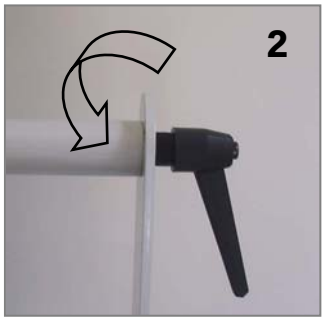
The box contains:

1. One central body (A)
2. Two bases of support (B)
3. One sensor bar (C)
4. One keyboard support (D)
5. A box with:
   - 1 assembling key set
   - 4 fixing screws M10x25 with washers (bases of support fixing)
   - 4 fixing keys TF M8x30 (moving controller)
   - 4 washers D20xD8 (moving controller)
   - 2 bolts TE M6x15 (sensor bar fixing)
   - 4 screws - cross - TC M4x10 (monitor fixing)



INSTRUCTIONS

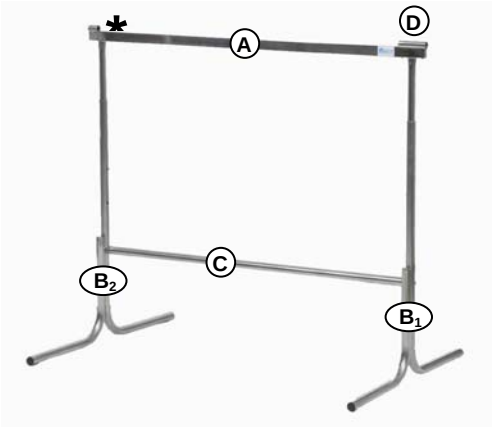
1. Lean the central body on a side and fix the base of support.
2. Put the DAD in plain.
3. Fix the washers (moving controller) as in fig.1.
4. Unblock the handle with caution. WARNING: the springs are in tens!
5. Set and hook the sensor bar (C) on the respective stirrups.
6. Set and hook the keyboard support (D) in the special lodging (vertical pipe with handle grip of locking).
7. In order to set the monitor support with the desired inclination: unblock the handle (fig.2) with an anticlockwise sense rotation. When you find the right position: block the handle with a rotation in the opposite direction.



*CE Label

DPA - Delos Postural Assistant - ASSEMBLY

1. Insert the "A" structure in the "B1-B2" structures
2. Connect firmly "B1-B2" and "C" with their screws
3. Insert the "D" sensor in the lodging of the "A" structure with their screws
4. In order to regulate in height the sensor bar see the following instructions:
   - From a side press the spring button and lift the vertical component of “A” structure in up and down position
   - Repeat the operation on the opposite side
   - Take the “A” bar in both hands. Lift or lower it maintaining the horizontal position: the “click” of the buttons will signal the new position.



DPB - Delos Postural Bench

The box contains the Delos Postural Bench ready to use.
Set the plan of support on the right vertically position using the special handle.

INSTRUMENTS POSITIONING

Place the instruments on a level and anti-slide surface with enough free space from any obstacles. Set the monitor so that the higher part of the screen is slightly below the level of the eyes. Looking at the centre of the screen the eyes have to be downward slightly turned.

Figure A - Monopodalic stance

The body has to be relaxed (particularly the trunk, the arms and the free leg). In order to reduce to the minimum the wear of the rolling parts it is necessary that the projection of the subject’s barycentre falls on the centre of the board. The arms have to be maintained in vertical position along the trunk, the hands are maintained around 10 centimetres above the sensor bar bringing the forearms forward. The elbow angle has to be equal or superior to 135°.

Figure B - Seated position

The support surface, vertically adjustable, of Delos Postural Bench allows board adjustment to keep the subject’s feet off the ground (the toes at 10 cm from the ground). The sensor bar is positioned in order to maintain the forearms and the hands at some centimetres of distance in a horizontal plan.

ON LINE REGISTRATION OF PRODUCTS

The registration of products on www.delos-international.com site is activated by clicking on "www" from the toolbar and it allows to download the software updating, the available new protocols and new courses.
The registration to the mailing list is automatic for Delos’ Users and it allows to receive technical, scientific and commercial information.

DELOS SYSTEMS SETUP

1. SOFTWARE SETUP

Warning: do not plug the instruments without installing the program.

1. Software installation and running must be carried out with "**Administrator**" privileges.
2. Check that Delos or other devices are not connected to the PC.
3. "**Real Time Antivirus Control**" must be disabled while Delos devices are working.
4. Check that the operating system is **Windows XP Professional** (the recommended operating system)

We suggest NOT to REMOVE the previous versions of DELOS programs.

To **INSTALL** the Delos Systems 4.0 program:

1. Insert Delos Systems CD (wait for the "auto run" window)
2. Select the language
3. Install **Acrobat Reader 6.0** (if a previous version of Acrobat is already present, it is necessary to uninstall it before to install the 6 version). At the end **DO NOT** restart the PC but continue with the setup
4. Install **MSSQL Server**
5. Install **Delos System**
6. Read and accept the licensing agreement
7. Insert the activation Code and press **Next** and than **Install**

WARNING: the files displacement needs several minutes. The installation bar can stay at the same point for a long time. Please wait. The setup will inform you when the process is finished.

8. Restart the PC
9. If it is not already present, shape a printer to be able to visualize and to print the evaluations reports.

If it is necessary to install other Delos programs: insert the CD Delos Systems and repeat the procedure (using the new activation code). For the installations that follow the first the procedure is faster.

To **REMOVE** the Delos Systems 4.0 program - **Delos Application Setup**:

1. From Start - Programs - DelosDPPS4.0 select "**Uninstall Delos**" or from My Computer - Disc C:\Delos\System, select "**Uninstaller.exe**"
2. Select the language
3. Follow the removing automatic procedure (Cancel all the Delos items if required by the procedure)
4. From InstallShield Wizard select "Remove" and continue with "Next" button
   The folders containing the trials (C:\Delos\User\Trials) and the reports (C:\Delos\User\Reports) previously recorded will automatically be renamed as "Trials.old" and "Reports.old" to allow not to lose the data.
   Once completed the new installation of the program, the patients' folders in "Trials.old" and "Reports.old" must be copied into the new folders "Trials" (C:\Delos\User\Trials) and "Reports" (C:\Delos\User\Reports)
5. Restart the computer and insert the Delos Systems CD.
6. Now you can Start the new installation setup.

To manually **REMOVE** (if necessary) **Microsoft SQL Server Desktop Engine**:

1. From Start - Settings - Control Panel - Add or Remove Programs, cancel Microsoft SQL Server Desktop Engine

2. CONNECTION

Warning: before plugging the instruments it's necessary to install the program and to respect the following order:

Step1: CONNECTION of "Delos Assistant Desk" or "Delos Postural Assistant":
plug the infrared sensor to the 5 poles DIN connector of DEB

Step2: CONNECTION of "Delos Equilibrium Board":
plug the DEB at the PC with the USB cable and follow the driver installation procedure for the new hardware

Step3: CONNECTION of "Delos Vertical Controller":
plug the DVC at the PC with the USB cable and follow the driver installation procedure for the new hardware

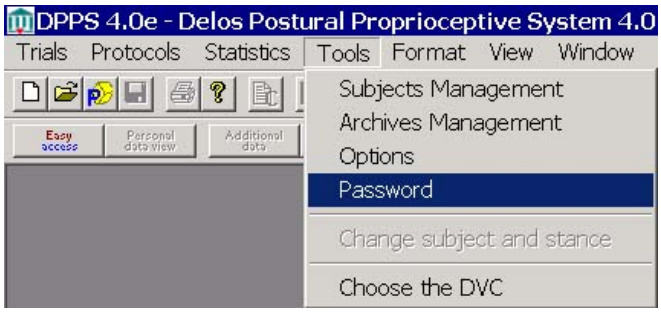
Make the identification procedure of new hardware (both DEB and DVC) on each USB door of the PC.

DELOS INSTRUMENTS IDENTIFICATION WITH WINDOWS XP

To verify if Windows XP has recognized all the Delos Instruments it is necessary to select:
Start - Settings - Control Panel - System - Hardware - Device Manager.
"Delos Devices" folder has to be present and inside you have to find as many "Delos USB" items as connected instruments.
Otherwise it's necessary to install the drivers that you'll find on the CD (Delos 4.0).

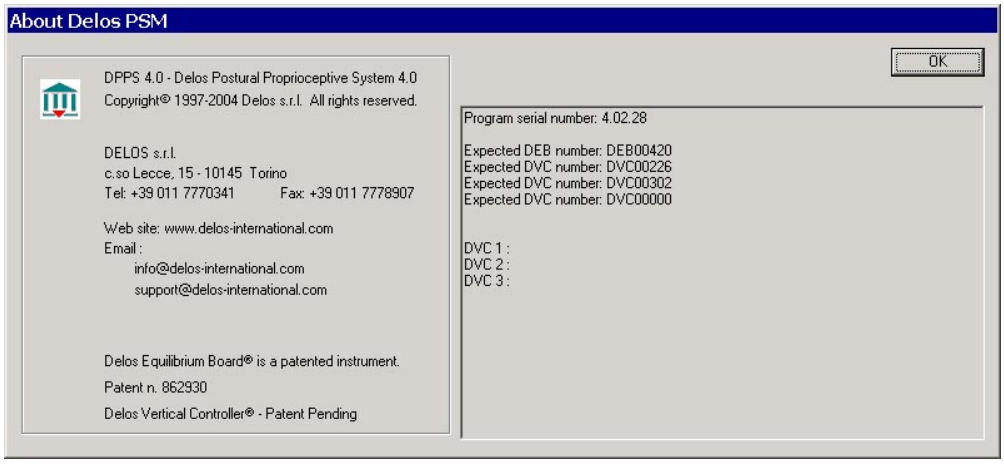
3. PASSWORD

The menu “Tools - Password” allows to set a personal protection code that will be required at the start of the program.
To disable the Password just select “Password” from the menu “Tools” and digit the code that was previously given, thus, revoking the current password.



4. VERIFY SERIAL NUMBER

The menu “Help - About Delos” allows to verify (when the instruments are connected) the serial numbers of the instruments and the version of the program.


About Delos PSM
OK
DPPS 4.0 - Delos Postural Proprioceptive System 4.0
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Delos Equilibrium Board® is a patented instrument.
Patent n. 862930
Delos Vertical Controller® - Patent Pending
Program serial number: 4.02.28
Expected DEB number: DEB00420
Expected DVC number: DVC00226
Expected DVC number: DVC00302
Expected DVC number: DVC00000
DVC 1 :
DVC 2 :
DVC 3 :

5. DVC CALIBRATION (for the systems with Delos Vertical Controller)

Before carrying out Protocols or static and/or dynamic Posturometry tests, it is always necessary to calibrate the Delos Vertical Controller:

- attach the DVC in the desired position (sternal or dorsal/lombo-sacral);
- position the user upright and on two feet;
- check the correct alignment of the trunk in a vertical position;
- press “DVC Calibration” (from the lateral command board) and confirm the operation by clicking OK.

The instrument will maintain the calibration parameters as long as it is not repositioned during the execution of the tests otherwise it will have to be re-calibrated.

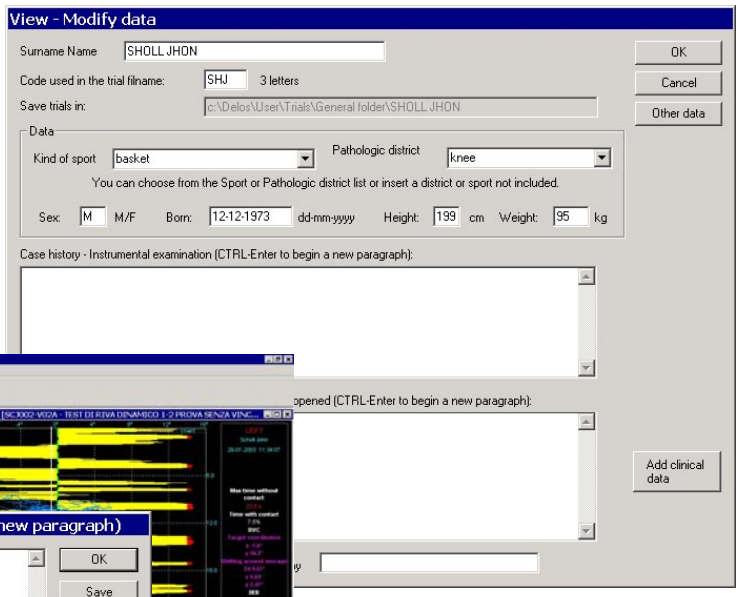
6. CHANGING OF ACTIVATION CODE

To change the activation code select "Help - Activation Code" of the toolbar. Follow the guide procedure, then close the program and restart it with the new activation code.

CLIENTS FILE

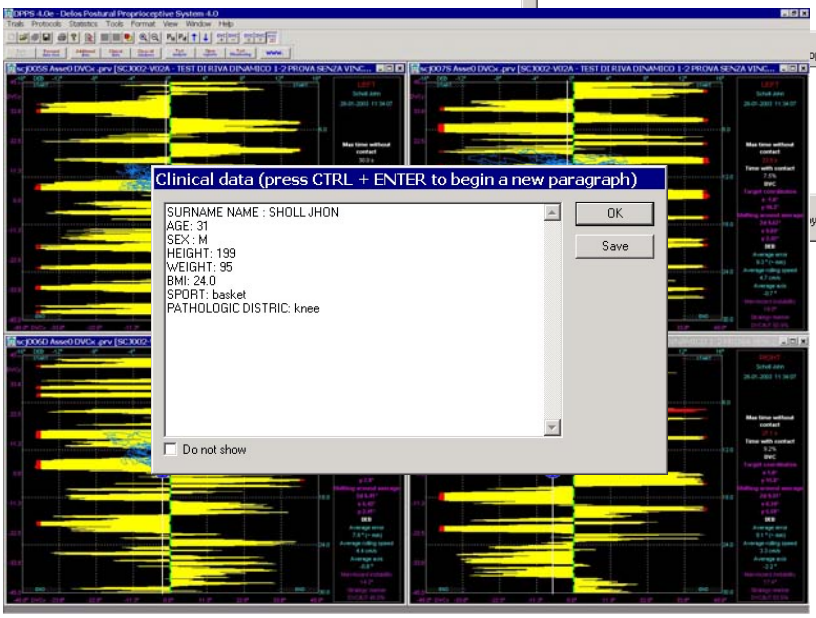
1. NEW SUBJECT

Click on “Tools - Subjects Management” from menu bar (or use “Archives and Subjects Management” from Easy Access) and press “New Subject”.
Insert the data. The three-letter code and the directory in which the tests are recorded will be automatically proposed. Both the proposals are modifiable by the user.



The routine allows to create for each user:

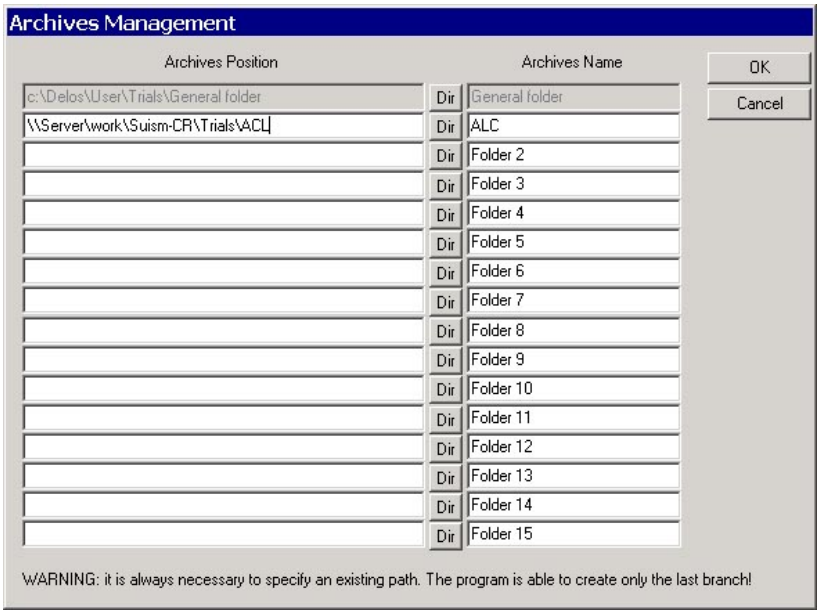
- a “User’s file“, who can be recalled while clicking on the button to "Personal data view" on the tools bar;



- a "Text file" (containing all subject's information) that is created while inserting a new name and it appears automatically in preview while opening a test. If we don't want to visualize the file it will be sufficient to blunt the option "Do not show". To reach again the data of the user's file, press the "Clinical data" on the tools bar.

2. PERSONAL ARCHIVES

Click on “Tools” from the menu bar (or on “Archives and Subjects Management” from Easy Access) and select “Archives Management” (View-modify archives).

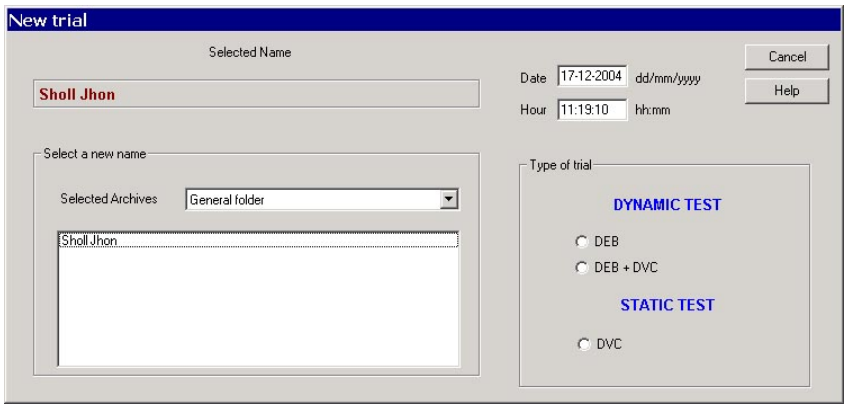


Click on “Dir” button.
A window will open a Directory Choice that allows to select the position of the Archive chosen. Press OK.
Click on the specific “Name Archives” of your choice, give it a name and the corresponding “Archive Position” path will appear.

3. MOVING OF A FILE FROM ONE ARCHIVE TO ANOTHER

To move the file containing the tests of a subject from one archive to another, just open “My Computer” (from the keyboard) and drag the file to a new position. The program will automatically up-date the archives.

SINGLE TRIAL

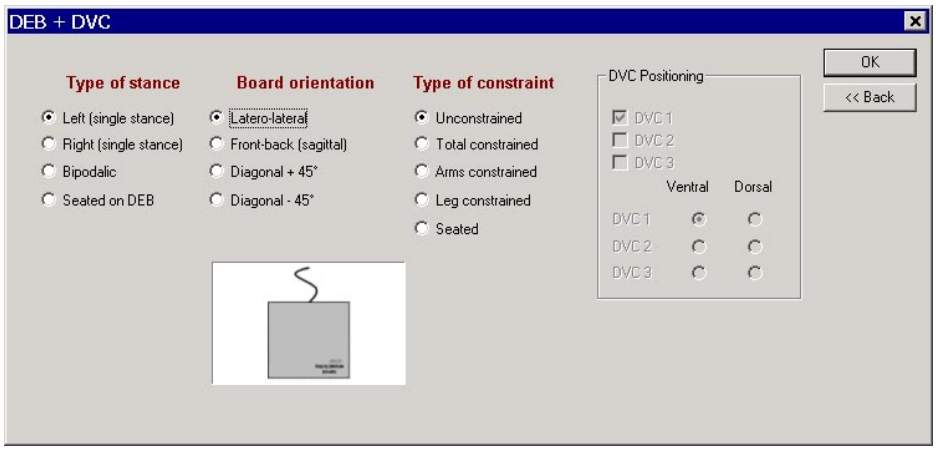


1. NEW TRIAL

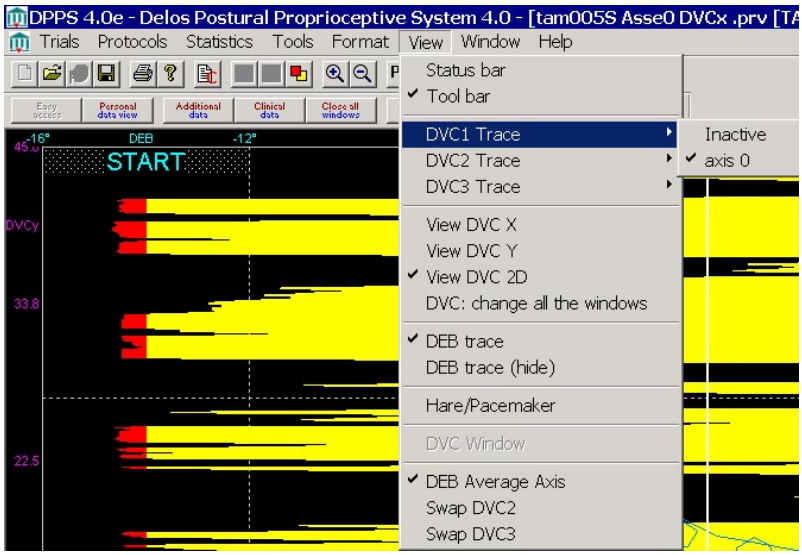
When you wish to carry out a new trial choose "New" present in menu "Trials" or use the relative key on the tools bar.
A dialog window is opened: choose the archive desired, the name and type of trial.

2. DYNAMIC POSTUROMETRY TRIALS (DPE excluded)

Selecting "**DEB**" or "**DEB+DVC**" **(only for DPPS)**, a new window is opened automatically from which it is possible to choose type of stance (left foot, right foot, both feet or seated on DEB), the positioning of the board (latero-lateral, etc.), the type of constraint and, in the DEB+DVC choice, also the positioning of the "Vertical Controller" (Sternal, Dorsal below the seventh cervical vertebra).
The positioning of the board in relation to the monitor is shown in the figures below and in the dialogue box that appears upon opening a new test.
Press OK to start test.



Regardless of the test selected, a new window appears on the screen with a black background and grid while the right hand side displays the "control board".
Choose the duration of the test by modifying the time indicated below the chronometer. The maximum duration selectable is 300 seconds, though a 30 second duration is automatically proposed.
Apply the DVC to the subject (in Sternal or Dorsal position according to the choice carried out previously) and click on "DVC Calibration". Follow the calibrating instructions (page 9) remembering correct positioning: upright position, on both feet, the trunk vertically position. Position yourself on "DEB" and press "Start".
"Count-down" will begin (duration can be modified in "Tools - Options"). The traces (area or linear), that indicate the moment-to-moment inclination of the balance board relative to the horizontal position, will appear on the video.
At the end of the test the mean axis of the test appears over the trace.

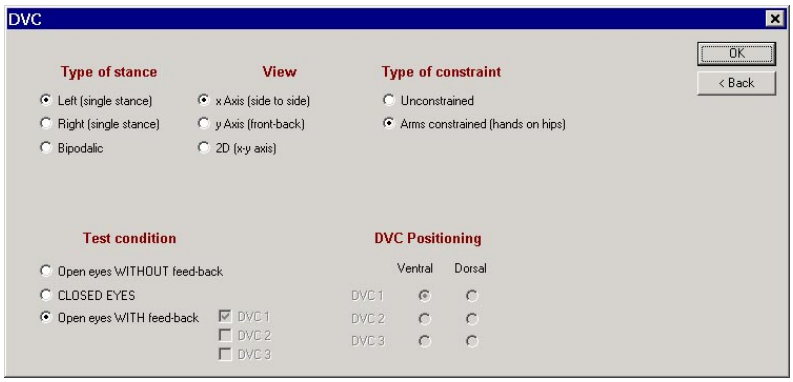


Further, in the integrated use of DEB and DVC it is possible to:

- pre-select (i.e. prior to the test) whether to visualise or hide the DEB Trace or DVC Trace selecting from menu "View" the different choices (DVC1 Trace: Inactive, Axis0, Axis -, Axis +, DEB Trace, Hide DEB Trace);
- choose the way of visualising and/or memorising the DVC Trace (in the case it is hidden). Upon re-opening the test, the trace will be visualised as pre-selected. It will, however, always be possible to switch visualisations mode (x, y, 2D) choosing the options: View DVCx, View DVCy, View DVC2D, or clicking on the corresponding buttons (DVCx, DVCy, DVC2D).

3. STATIC POSTUROMETRY TRIALS (only for DPPS and DPE)

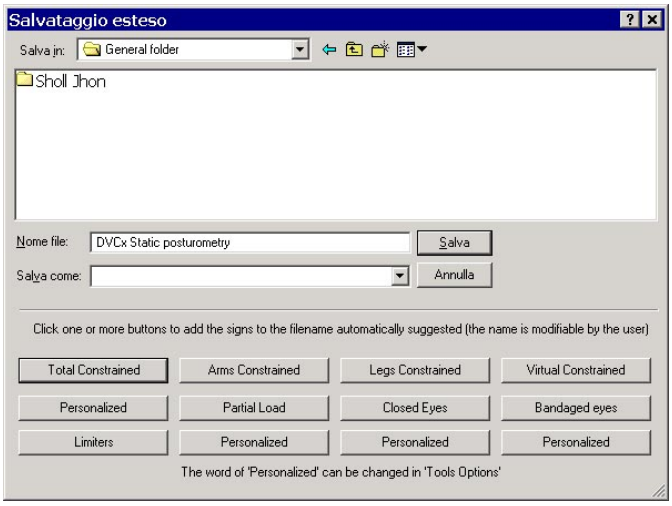
By selecting "**DVC**" a new window will automatically open and it will be possible to choose : the kind of support and visualisation, the kind of constraint, the Test conditions and the Vertical Controller positioning (at sternal level – below the jugular; at dorsal level – below the seventh cervical vertebra.



Press OK to start the trial
Regardless of the type of test chosen, a new window appears on the screen with a white background segmented by a grid, while the right hand side displays the "command panel". Choose the duration of the test modifying the time indicated below the chronometer. The maximum selectable duration is 300 seconds, a duration of 30 seconds is proposed automatically.
Apply the DVC to the subject (in Frontal or Dorsal position according to the choice previously carried out) and click on "DVC Calibration". Follow the calibrating instructions (page 9) remembering the correct positioning: upright position, bipodalic stance, trunk in vertical position.

Activate "Start".
"Count-down" will start (the duration can be modified in "Tools - Option"). On the video the trace (linear) will appear that indicates, instant by instant, the inclination of the trunk as regards to the vertical position.

4. SAVING, OPENING AND COMPARISON OF ONE OR MORE TRIALS



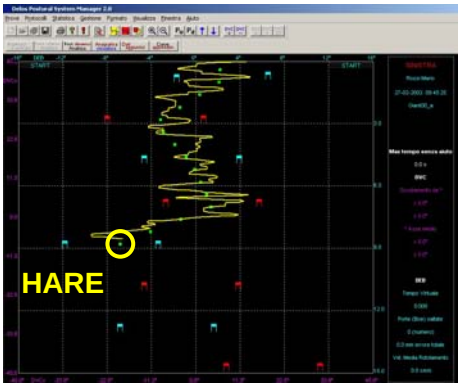
Upon completing a test (Static or Dynamic) it is possible to save it by: choosing "Save or Save as" on the "Trials" menu or "Save as" on the lateral command board.
The program will open a dialogue window automatically proposing a name corresponding to the type of test conducted and the subject who carried out the test.
Further characteristics can be added to the file name clicking on the proposal buttons inside the dialogue window.
To visualise and compare the tests, it is necessary to choose "Open" from menu "Trials" or the key from the instrument bar. From the dialogue window choose the tests that you wish to open. For multiple selections (see below) press **Ctrl**. The tests on the screen can be graphically organised by means of commands in "Window" menu. With command "Close all trials" from menu "Trials" it is possible to close all the open tests at the same time.

It is also possible to save the group of tests shown on the screen by clicking on menu "Trials" "Save Work Area". The program will open a dialogue window automatically proposing as mane of file (with extension *.wrk) the name of the subject who carried out the test.

5 COMMENT OF A TEST

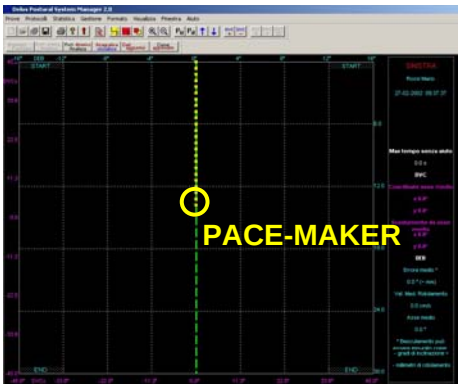
With the command "Trial Comments" of "Trials" menu it is possible to insert at the end of a test or subsequently upon reopening the file, a comment text that is however always changeable. The space available is about 32000 characters.

OPTIONS FOR SINGLE TRIALS



1. HARE AND PACE-MAKER (DPE excluded)

The **hare** is a pace marker, or a series of light points which, progressively appear along the course of the track, to forewarn the user on the direction to be followed. Activating the Hare (a yellow trace appears in real time) serves to minimise the intervention of the conscious component of proprioception and to solicit the reflexive and automatic use of afferent proprioceptive signals..

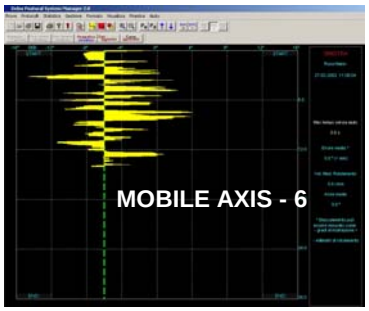


The **pace-maker** marks elapsed time by way of a series of light points that progressively appear, informing the user of his or her running time since the onset of the test.
When the pace-maker is

activated, the trace of the subject's spatial position does not appear in real time while the test is running though it is available at the end of the test.
The absence of such visual information on the spatial position of the board enables the maximum use of proprioceptive signals deriving from the periphery necessary for the subject to conduct the assigned task (e.g., maintaining the horizontal position of the platform or following a specific track course).
At the end of a test with the "pace-maker" the trace is visualised allowing comparisons with tests of the same type, that were conducted without the pace-maker function. With holding visual feedback of the real time inclination of the board, forced the subject to use signals deriving from peripheral proprioceptors.
The two functions can be activated (separately) by selecting "hare" or "pace-maker" displayed on the side bar/command panel.

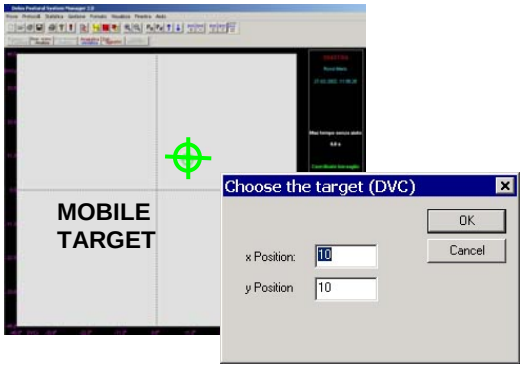
2. MOBILE AXIS (DPE excluded)

Other than trying to maintain the balance board in the horizontal position, more complex tasks can be conducted via movable axis, which can be changed from the controls on the side bar (below the chronometer).

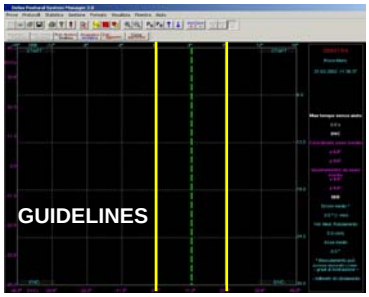


3. MOBILE TARGET (for DPPS and DPE)

In the static posturometry trials (in single stance on the ground) it is possible to propose dynamic repositioning tasks (target pursuit). To insert the coordinates (Target DVCx – Target DVCy) click on the "target" button of the control side bar.



4. GUIDELINES (DPE excluded)



They can be activated and adjusted both for position and width of the two lines with the side controls. They allow a more precise execution of the task , as they provide a maximum excursion range, which is very useful especially for the seated dynamic posturometry.

5. COURSES

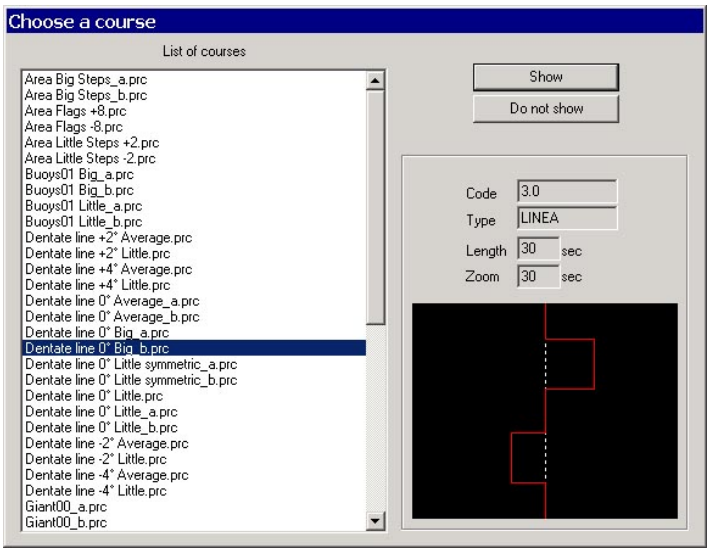
It is possible to select several kinds of courses, both for the static and dynamic posturometry trials, by clicking on the "Course" button in the lateral control board.

The "Area" courses
The Area courses are indicated by red areas on the background.
The subject's task consists in covering the red areas with yellow traces, produced by the balance board movement, while keeping the board horizontal when the task is represented by a red line, corresponding to the axis 0°.

The "Path" courses
The "Path" courses are limited by two red lines within which the trace produced by the rocking of the board has to be kept.

The "Giant", "Slalom" and "Buoys" courses
The "Giant" and "Slalom" courses consist in a series of alternating blue and red "flags" (in the "Buoys" courses the flags are substituted by blue and red circles), between which the trace produced by the rocking of the board passes.

The "Line" courses
The "Line" course are characterised by the presence of a broken red line on a black background.
The task consists in following the broken red line visualised on the monitor with the yellow trace, produced by the rocking of the board.



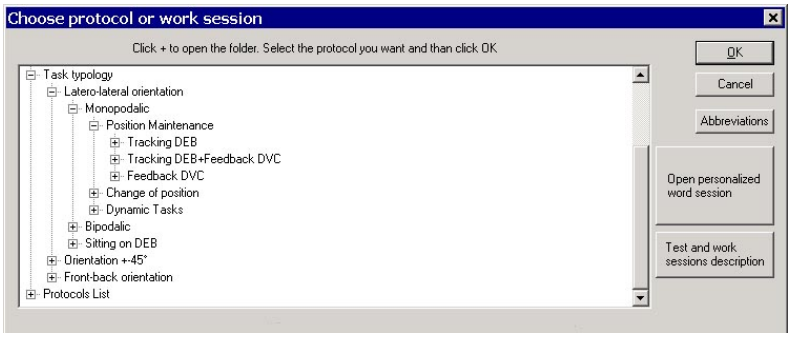
PROTOCOLS

Evaluation and training protocols allow the implementation of test sequences that proceed automatically without any external aid. The examples proposed provide protocols subdivided into “usage areas”, “typology of tasks” and “protocols targeting”.

1. TASK TYPOLOGY PROTOCOLS (DPE excluded)

The tasks typology classification allows to create personalized work sessions. It’s possible to choose:

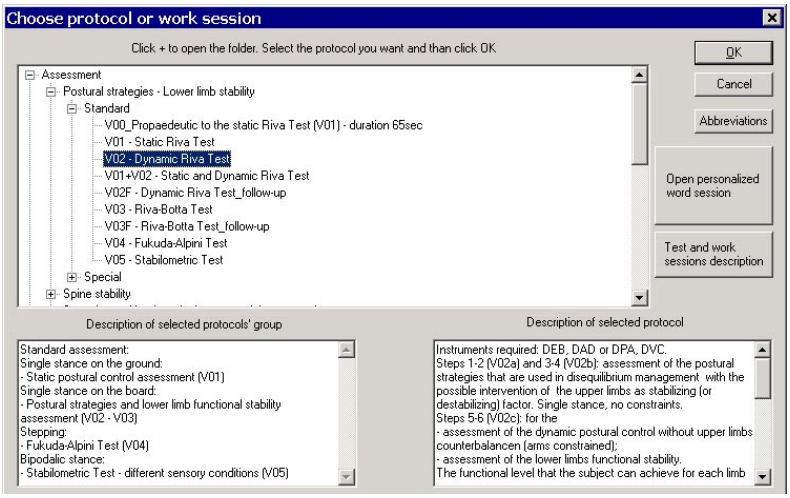
- the orientation of the board (latero-lateral, diagonal 45°, front-back);
- the stance (monopodalic, bipodalic, seated on DEB);
- the task to assign (to maintain a position, to change a position or dynamic tasks);
- the typology of feedback and tracking visualized on the screen (only DEB, only DVC, both DEB+DVC)



All proposed protocols are constituted by homogeneous trials: 4 for the sequences in monopodalic and bipodalic stance and 3 for the tests seated on DEB.

2. PROTOCOLS FOR USAGE AREAS (for DPPS - DPE)

The filing according to such classification allows to have access to each single protocol “by problem type”.

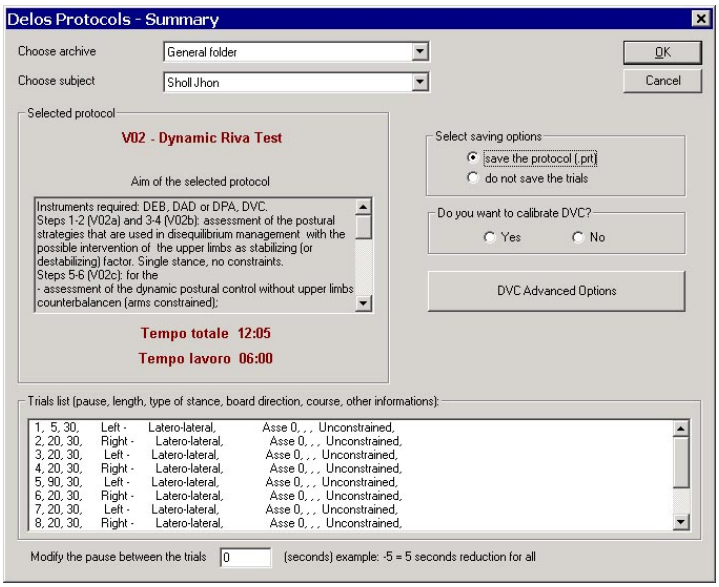

Choose protocol or work session
Click + to open the folder. Select the protocol you want and than click OK
OK
Cancel
Abbreviations
Open personalized word session
Test and work sessions description
Assessment
Postural strategies - Lower limb stability
Standard
V00_Propaedeutic to the static Riva Test (V01) - duration 65sec
V01 - Static Riva Test
V02 - Dynamic Riva Test
V01+V02 - Static and Dynamic Riva Test
V02F - Dynamic Riva Test_follow-up
V03 - Riva-Botta Test
V03F - Riva-Botta Test_follow-up
V04 - Fukuda-Alpini Test
V05 - Stabilometric Test
Special
Spine stability
Description of selected protocols' group
Standard assessment:
Single stance on the ground:
- Static postural control assessment (V01)
Single stance on the board:
- Postural strategies and lower limb functional stability assessment (V02 - V03)
Stepping:
- Fukuda-Alpini Test (V04)
Bipodalic stance:
- Stabilometric Test - different sensory conditions (V05)
Description of selected protocol
Instruments required: DEB, DAD or DPA, DVC.
Steps 1-2 (V02a) and 3-4 (V02b): assessment of the postural strategies that are used in disequilibrium management with the possible intervention of the upper limbs as stabilizing (or destabilizing) factor. Single stance, no constraints.
Steps 5-6 (V02c): for the
- assessment of the dynamic postural control without upper limbs counterbalancen (arms constrained);
- assessment of the lower limbs functional stability.
The functional level that the subject can achieve for each limb

Five main areas are proposed (Static Posturometry, Rehabilitation, Prevention, Fitness, Sport) and it is possible to select different protocols within each area.
Once the choice has been made, a dialogue box appears displaying the description of the selected protocol groups, of each selected protocol and of all the different execution modes related to the work groups shown.

3. PROTOCOLS USE (for usage areas and typology of tasks)

When you wish to open a protocol it is possible to: choose “New” present in menu “Protocols”, using the relevant key on the instrument bar or clicking "Test and Work Sessions" of “Easy Access”.

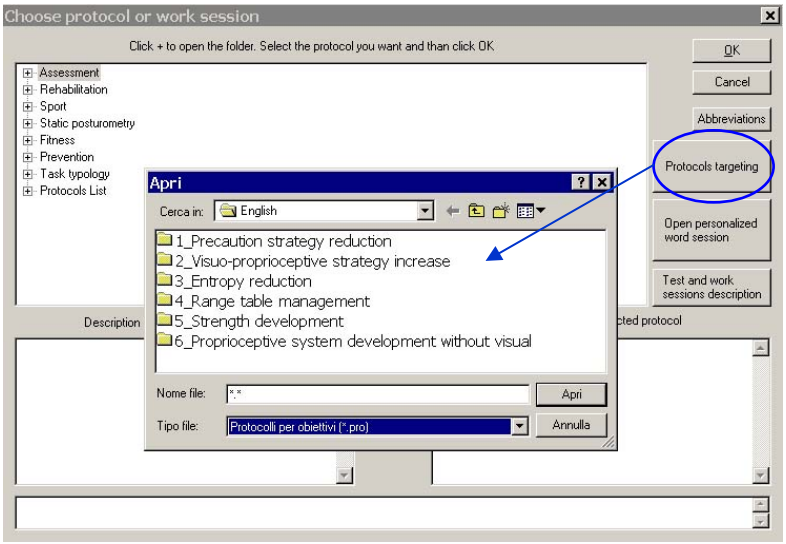
A dialogue window is opened in which there appears a description of the group of Protocols chosen, and a description of each Protocol selected.
Choose a protocol and press “OK”.
Then choose the Archieve, the subject’s name and select: Saving option, DVC Calibration (see page 9), and DVC Advanced Options.
The completed tests can be saved with extension “.prt”.
Alternatively, no test will be saved if the option “do not save the trials” is selected.
It is possible to modify the duration of the interval between the tests (count-down) by adding or subtracting the desired number of seconds from the proposed duration (example of the above figure: -5 = lessens by 5 seconds all the count-downs of the protocol).
Press OK to continue.
It is possible to interrupt protocol by pressing “Pause”. The keys “Continue”, “Previous”, “Following”, “Stop” that appear on the side command panel allow one to continue the test, return to the previous, pass on to the successive or close Protocol of Evaluation.
To open tests carried out with a protocol the procedure is the same as that of normal tests. Clicking on “Open” of Toolbar (or “Open” of menu “Protocols” or using the Easy Access) a list of all tests will appears.


Delos Protocols - Summary
Choose archive
General folder
Choose subject
Sholl Jhon
OK
Cancel
Selected protocol
V02 - Dynamic Riva Test
Aim of the selected protocol
Instruments required: DEB, DAD or DPA, DVC.
Steps 1-2 (V02a) and 3-4 (V02b): assessment of the postural strategies that are used in disequilibrium management with the possible intervention of the upper limbs as stabilizing (or destabilizing) factor. Single stance, no constraints.
Steps 5-6 (V02c): for the
- assessment of the dynamic postural control without upper limbs counterbalancen (arms constrained);
Tempo totale 12:05
Tempo lavoro 06:00
Select saving options
save the protocol (.prt)
do not save the trials
Do you want to calibrate DVC?
Yes
No
DVC Advanced Options
Trials list (pause, length, type of stance, board direction, course, other informations):
1, 5, 30, Left - Latero-lateral, Asse 0, , , Unconstrained,
2, 20, 30, Right - Latero-lateral, Asse 0, , , Unconstrained,
3, 20, 30, Left - Latero-lateral, Asse 0, , , Unconstrained,
4, 20, 30, Right - Latero-lateral, Asse 0, , , Unconstrained,
5, 90, 30, Left - Latero-lateral, Asse 0, , , Unconstrained,
6, 20, 30, Right - Latero-lateral, Asse 0, , , Unconstrained,
7, 20, 30, Left - Latero-lateral, Asse 0, , , Unconstrained,
8, 20, 30, Right - Latero-lateral, Asse 0, , , Unconstrained,
Modify the pause between the trials
0
(seconds) example: -5 = 5 seconds reduction for all

4. PROTOCOLS TARGETING (for DPPS)

In “Protocols Targeting” area you’ll find different protocols able to develop specific targets as:

1_Precaution strategy reduction
2_Visuo-proprioceptive strategy increase
3_Entropy reduction
4_Range table management
5_Strength development
6_Proprioceptive system development without visual

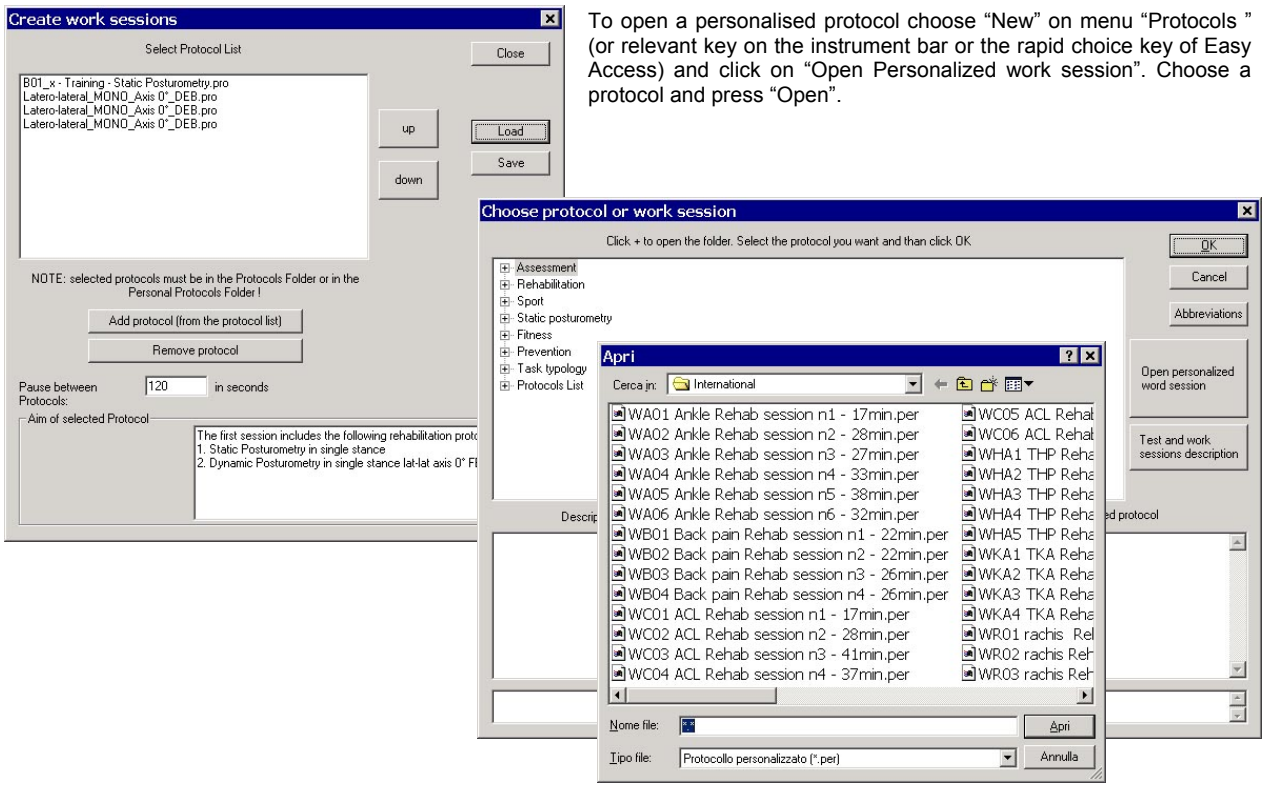


When you wish to open a “Protocol Targeting” select "Test and Work Sessions" of “Easy Access” and then press the Protocols Targeting button.

Choose the folder for the specific target, select the protocol and press “OK” than follow the same instruction you can find in “Protocols Use” (page 14).

5. CREATE WORK SESSIONS (for DPPS and DPE)

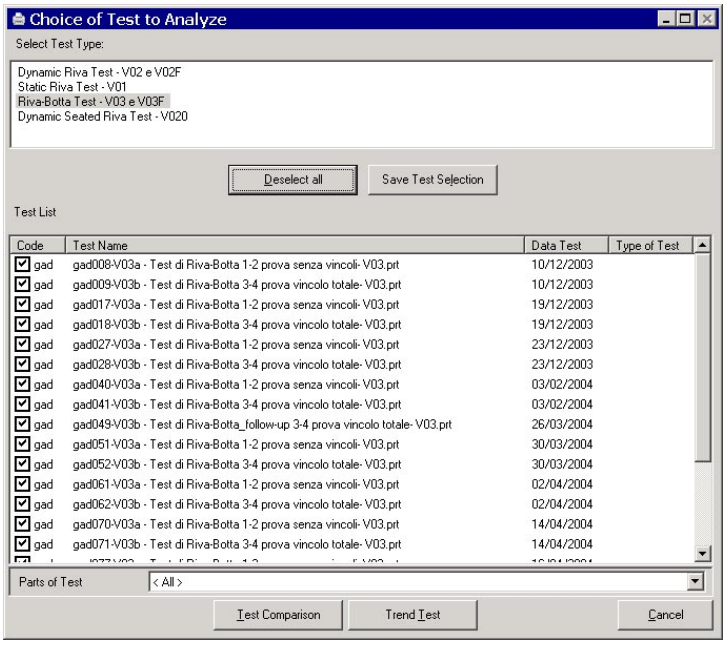
The function allows to program to save protocol sequences to propose to the user.
Select “New Personal Protocols” from Protocols menu (or use the Easy Access).
Click on “Add protocol” in the dialogue box, choose one or more protocols, the interval between them, the aim and save the list in “Work Sessions” directory with .”per” extension.
It is also possible to modify the order in which each protocol is proposed using the “Up-Down” key available in the window.


Create work sessions
Select Protocol List
Close
B01_x - Training - Static Posturometry.pro
Latero-lateral_MONO_Axis 0°_DEB.pro
Latero-lateral_MONO_Axis 0°_DEB.pro
Latero-lateral_MONO_Axis 0°_DEB.pro
up
Load
Save
down
NOTE: selected protocols must be in the Protocols Folder or in the Personal Protocols Folder !
Add protocol (from the protocol list)
Remove protocol
Pause between Protocols:
120
in seconds
Aim of selected Protocol
The first session includes the following rehabilitation proto
1. Static Posturometry in single stance
2. Dynamic Posturometry in single stance lat-lat axis 0° Fl
Choose protocol or work session
Click + to open the folder. Select the protocol you want and than click OK
Assessment
Rehabilitation
Sport
Static posturometry
Fitness
Prevention
Task typology
Protocols List
OK
Cancel
Abbreviations
Open personalized word session
Test and work sessions description
Apri
Cerca in: International
WA01 Ankle Rehab session n1 - 17min.per
WA02 Ankle Rehab session n2 - 28min.per
WA03 Ankle Rehab session n3 - 27min.per
WA04 Ankle Rehab session n4 - 33min.per
WA05 Ankle Rehab session n5 - 38min.per
WA06 Ankle Rehab session n6 - 32min.per
WB01 Back pain Rehab session n1 - 22min.per
WB02 Back pain Rehab session n2 - 22min.per
WB03 Back pain Rehab session n3 - 26min.per
WB04 Back pain Rehab session n4 - 26min.per
WC01 ACL Rehab session n1 - 17min.per
WC02 ACL Rehab session n2 - 28min.per
WC03 ACL Rehab session n3 - 41min.per
WC04 ACL Rehab session n4 - 37min.per
WC05 ACL Rehab
WC06 ACL Rehab
WHA1 THP Reha
WHA2 THP Reha
WHA3 THP Reha
WHA4 THP Reha
WHA5 THP Reha
WKA1 TKA Reha
WKA2 TKA Reha
WKA3 TKA Reha
WKA4 TKA Reha
WR01 rachis Reh
WR02 rachis Reh
WR03 rachis Reh
Nome file: *.*
Apri
Tipo file: Protocollo personalizzato (*.per)
Annulla

To open a personalised protocol choose “New” on menu “Protocols ” (or relevant key on the instrument bar or the rapid choice key of Easy Access) and click on “Open Personalized work session”. Choose a protocol and press “Open”.

6. TEST MONITORING (for DPPS and DPE)

The function allows to analyze the assessment test performed by the user.
Select "Test Monitoring" of the "Statistics" menu (or of the Easy Access), and choose the name and the type of test to analyze according to the options "Test Comparison" and "Trend Test"


Choice of Test to Analyze
Select Test Type:
Dynamic Riva Test - V02 e V02F
Static Riva Test - V01
Riva-Botta Test - V03 e V03F
Dynamic Seated Riva Test - V020
Deselect all
Save Test Selection
Test List
Code
Test Name
Data Test
Type of Test
gad gad008-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 10/12/2003
gad gad009-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 10/12/2003
gad gad017-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 19/12/2003
gad gad018-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 19/12/2003
gad gad027-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 23/12/2003
gad gad028-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 23/12/2003
gad gad040-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 03/02/2004
gad gad041-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 03/02/2004
gad gad049-V03b - Test di Riva-Botta_follow-up 3-4 prova vincolo totale- V03.prt 26/03/2004
gad gad051-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 30/03/2004
gad gad052-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 30/03/2004
gad gad061-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 02/04/2004
gad gad062-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 02/04/2004
gad gad070-V03a - Test di Riva-Botta 1-2 prova senza vincoli- V03.prt 14/04/2004
gad gad071-V03b - Test di Riva-Botta 3-4 prova vincolo totale- V03.prt 14/04/2004
Parts of Test
< All >
Test Comparison
Trend Test
Cancel

7. PRINT

It is possible to print each window in black and white or in colour. The program will automatically use “Windows”’ default printer.
The program prints the content of a test as displayed on the monitor, thus, it is possible to print the test either in part or in its entirety.
Remember to set white characters and signs to a different colour (from the Format Menu) when printing in colour.
To personalise printout headings, change the contents of the three lines in “Tools - Options - Heading of print”.
The program also allows printing graph and text from the “Reports”.

WARNING

For a complete guide of:

- **REPORTS ANALYSIS OF THE ASSESSMENT TESTS;**
- **PRINT REPORTS;**
- **TEST MONITORING;**

consult the sections "Methodology" and "Reports" clicking on the button "Help" of the Easy Access or choosing the function "Help" on the tools bar.

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